



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> Carolyn Y. Chu	<b>Project Number</b> <b>S1407</b>
<b>Project Title</b> <b>The Abrasiveness of Exfoliants on Skin</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The purpose of my project is to find out which exfoliants are most abrasive on skin. One of my goals is to find out what products are good for your skin so people may pick products which are right for them and not to damaging.</p> <p><b>Methods/Materials</b> Materials: balance, 4 types of exfoliants (Clean &amp; Clear Daily Pore Cleanser, Biore Mild Daily Cleansing Scrub, Freeman Facial Scrub, and St. Ives Apricot Scrub), running water, and 50 pieces of chamois (2" by 2"). I tested by first massing the piece of chamois, then getting it completely wet, applying the exfoliant, scrubbing it 30 times, washing off the exfoliant, and letting it dry in the sun. After it was completely dry, I recorded its mass once again and calculated the percentage of mass loss. Ten trials were performed with each exfoliant and the control.</p> <p><b>Results</b> The St. Ives Apricot Scrub was the most abrasive and the Biore Mild Daily Cleansing Scrub was the least abrasive. The Freeman Facial Scrub was the second most abrasive and the Clean &amp; Clear was the third most abrasive. Not much change came to the control.</p> <p><b>Conclusions/Discussion</b> My hypothesis was incorrect. I found that the St. Ives Apricot Scrub was the most abrasive not the Clean &amp; Clear Daily Pore Cleanser. The St. Ives had a rough, sandy texture, and it also contained fragrances which are known to be harsh on certain skin. The least abrasive exfoliant, the Biore Mild Daily Cleansing Scrub, had a soft, smooth texture, and it did not contain any fragrances.</p>	
<b>Summary Statement</b> My project is about testing the abrasiveness of exfoliants so that people may pick out products which are good for their skin and won't cause too much damage.	
<b>Help Received</b> Mrs. Zadik aided me getting materials and helped with testing methods, Ms. Houston from the Lu Ross Academy allowed me to interview her, and family helped lend support.	